

## Project Based Learning in Reading and Science: Why?

Whether students investigate what happens to their family's garbage or design an entire city, project-based learning aims to engage them in realistic, thought-provoking problems.

### What's the Idea?

The core idea of project-based learning is that real-world problems capture students' interest and provoke serious thinking as the students acquire and apply new knowledge in a problem-solving context. The teacher plays the role of facilitator, working with students to frame worthwhile questions, structuring meaningful tasks, coaching both knowledge development and social skills, and carefully assessing what students have learned from the experience. Advocates assert that project-based learning helps prepare students for the thinking and collaboration skills required in the workplace.

Project-based learning creates opportunities for groups of students to investigate meaningful questions that require them to gather information and think critically. Typical projects present a problem to solve (How can we reduce the pollution in the schoolyard pond?); a phenomenon to investigate (Why do you stay on your skateboard?); a model to design (Create a scale model of an ideal high school); or a decision to make (Should the school board vote to build a new school?).

### What's One to Do?

These studies suggest that project-based learning, when fully realized, can improve student learning. However, the research also underscores how difficult it is to implement project-based learning well. Together these findings suggest caution in embracing this practice unless the conditions for success are in place, including strong school support, access to well-developed projects, and a collaborative culture for teachers and students.

Yet, teachers can use the key ideas underlying project-based learning in some measure in any classroom. Using real-life problems to motivate students, challenging them to think deeply about meaningful content, and enabling them to work collaboratively are practices that yield benefits for all students.